

State Water Resources Control Board

REVIEW SUMMARY REPORT – ADDITIONAL WORK FOURTH REVIEW – OCTOBER 2014

Agency Information

Agency Name: Sonoma County Department of Health Services (County)	Address: 625 5 TH Street, Santa Rosa, CA 95404
Agency Caseworker: Darcy Bering	Case No.: 00001917

Case Information

USTCF Claim No.: 5860	Global ID: T0609700800
Site Name: CHEVRON #9-0152	Site Address: 2 Petaluma Blvd. Petaluma, CA 94952
Responsible Party: Ms. Carryl Macleod Chevron Environmental Management Company	Address: 6101 Bollinger Canyon Road San Ramon, CA 94583
USTCF Expenditures to Date: \$900,113	Number of Years Case Open: 26

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609700800

Summary

The Low-Threat Underground Storage Tank (UST) Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy. This case does not meet all of the required criteria of the Policy. A summary evaluation of compliance with the Policy is shown in **Attachment 1: Compliance with State Water Board Policies and State Law**. The Conceptual Site Model upon which the evaluation of the case has been made is described in **Attachment 2: Summary of Basic Case Information (Conceptual Site Model)**. Historical recommendations by Fund staff are described in **Attachment 3: Previous Recommendations**. Highlights of the case follow:

The case is a former commercial petroleum fueling facility and is currently a fenced in vacant lot. An unauthorized release was reported in September 1987 and seven gasoline USTs were removed in February 1988. Six replacement gasoline USTs were removed in 2009. A groundwater extraction system was operated at the Site from 1993 to 1995 and removed approximately 370,393 gallons of impacted groundwater with an estimated six gallons of gasoline. Active remediation has not been conducted at the Site for the past eleven years. Since 1989 twenty groundwater monitoring wells have been installed and regularly monitored. According to groundwater data, water quality objectives have been achieved or nearly achieved for all constituents except benzene and methyl tert-butyl ether (MTBE).

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no supply wells regulated by the California Department of Public Health within 1,000 feet of the defined plume boundary. No other water supply wells have been identified within 1,000 feet of the defined plume boundary in files reviewed. The Petaluma River is located 400 feet north and downgradient of the Site. Water is provided to water users near the Site by the

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City of Petaluma. The affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of impacted groundwater are not threatened, and it is unlikely that they will be, considering these factors in the context of the site setting.

Rationale for Closure under the Policy

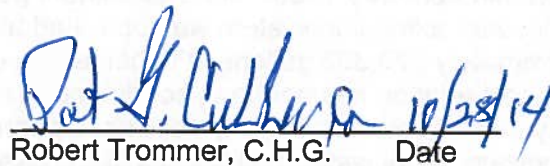
- General Criteria: The case meets all eight Policy general criteria.
- Groundwater Specific Criteria: The case does not meet Policy Criteria. The contaminant plume that exceeds water quality objectives is greater than 100 feet in length. Prior to its destruction in August 2012, source area well MW-20 had benzene concentrations greater than 3,000 µg/L. Petaluma River is 400 feet north and downgradient of the Site.
- Vapor Intrusion to Indoor Air: This case does not meet Policy Criteria. Prior to its destruction in August 2012, the source area well MW-20 had benzene concentrations greater than 3,000 µg/L. Groundwater is less than ten feet below ground surface (bgs).
- Direct Contact and Outdoor Air Exposure: The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Residential use, and the concentration limits for a Utility Worker are not exceeded. There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene can be used as a surrogate for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Recommendation

The Fund recommends focused remediation in the source area at the former monitoring well MW-20 location to achieve case closure in a timely manner. The Fund understands that a large scale soil excavation (down to 15 feet bgs) is proposed as part of a planned redevelopment at the Site. The Fund does not consider such excavation necessary for the purpose of corrective action and case closure.



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